

AMENDMENTS TO THE CLAIMS

The following list of claims replaces all prior versions, and listings, of claims in the application:

Claim 1-7 (cancelled, without prejudice or disclaimer to the subject matter contained therein)

8. (Currently Amended) A method of operating a pulse echo ranging system comprising the steps of:
 - providing a transducer assembly operable to send and receive high frequency acoustic energy;
 - transmitting, through the transducer assembly, at least two energy pulses having substantially different frequencies;
 - receiving reflected echoes of the at least two energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and
 - combining the received signals to provide enhanced data.
9. (Original) A method according to claim 8, wherein the received signals are summed.
10. (Original) A method according to claim 8, wherein the received signals are differenced.
11. (Original) A method according to claim 8, wherein a signal received at a second frequency is used as a reference against which the first signal can be compared to provided enhanced data.
12. (Cancelled)

13. (New) A method of operating a pulse echo ranging system comprising the steps of:
- providing a transducer assembly operable to send and receive high frequency acoustic energy;
 - transmitting, through the transducer assembly, at least two energy pulses having substantially different frequencies;
 - receiving reflected echoes of the at least two energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and
 - summing the received signals to provide enhanced data.
14. (New) A method of operating a pulse echo ranging system comprising the steps of:
- providing a transducer assembly operable to send and receive high frequency acoustic energy;
 - transmitting, through the transducer assembly, a first energy pulse and a second energy pulse, the second energy pulse having a frequency at least twice that of the first energy pulse;
 - receiving reflected echoes of the first and second energy pulses at the transducer assembly and converting the reflected echo signals to received signals; and
 - combining the received signals to provide enhanced data.
15. (New) A method according to claim 14, wherein the received signals are summed.
16. (New) A method according to claim 14, wherein the received signals are differenced.